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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/657,679	09/08/2000	Marc A. Edlein	D-43378-01	2639

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CRYOVAC, INC.
SEALED AIR CORP
P.O. BOX 464
DUNCAN, SC 29334

EXAMINER
NOLAN, SANDRA M

ART UNIT	PAPER NUMBER
1772	5

DATE MAILED: 02/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/657,679	EDLEIN ET AL.	
	Examiner	Art Unit	
	Sandra M. Nolan	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement submitted on October 2, 2001 (Paper No. 3) was considered by the examiner. A copy of the initialed citation form is enclosed.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-6, 8-9, 12-13, 18-26, 34, 48 and 49 rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al (US 5,962,092) in view of Kosterka (US 4,410,560).

Kuo shows films having antifog base layers coated with outer films of inks; the films may be treated with UV radiation or electron treatment. See col. 14, line 38 and col. 15, line 56.

Kuo fails to teach electron beam (e-beam) cured inks.

Kosterka teaches e-beam cured inks on plastic substrates (col. 1, line 12). The Kosterka technology is used to make container lids (col. 5, line 11). The Kosterka invention increases processing speed and print quality (col. 2, lines 18-19).

Placing a film on a container/tray holding food is deemed to be making a container lid.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the e-beam curable inks of Kosterka to print on the antifog base layers of Kuo.

The motivation to employ the e-beam curable inks of Kosterka is found at col. 2, lines 18-19 of Kosterka, where the speed and print quality of printings made using the Kosterka technology is taught. It is deemed desirable to employ print packaging faster and with better print quality in order to make product packaging more efficient.

The use of any suitable amount of cured ink to reduce ghosting is deemed a matter of optimization based on routine experimentation. *In re Boesch*, 205 USPQ 215 (CCPA 1980).

The level of e-beam exposure and/or degrees of polymerization or crosslinking are matters of optimization, to be ascertained by routine experimentation. *In re Boesch*, 205 USPQ 215 (CCPA 1980).

5. Claims 7 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo and Kosterka as applied to claims 1-6, 8-9, 12-13, 18-26, 34 and 48-49 above, and further in view of Babrowicz (US 5,837,335).

Kuo and Kosterka are discussed above.

They fail to teach films having the shrinkage properties recited in claims 7 and 32.

Babrowicz teaches that films having the shrinkage properties called for in claims 7 and 32 are used in multilayer films for packaging (abstract). The films are grease resistant and maintain their optics (abstract; title).

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the films of Babrowicz as the base films in the printed packaging films suggested by the combination of Kuo and Kosterka.

The motivation to employ the films of Babrowicz in the printed packaging films suggested by the combination of Kuo and Kosterka is found in the abstract and title of Babrowicz, where the grease resistance and optical properties of the Babrowicz films are discussed. It is deemed desirable to make films having grease resistance and good optical properties when packaging foods so that the films do not absorb grease and the packages remain visually attractive.

6. Claims 10-11, 16-17, 27-30, 33, 35-38, 41-47, 50-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo and Kosterka as applied to claims 1-6, 8-9, 12-13, 18-26, 34 and 48-49 above, and further in view of Johnson (US 5,945,183).

Kuo and Kosterka are discussed above.

They fail to teach films coated with solvent-based inks and UV curable, two component coatings.

Johnson shows thermoset (col. 4, lines 21-22) solvent-based inks (abstract) and UV curable coatings over them on labels. The base film is a plastic film of 0.001 to

0.005 inches thickness (col. 2, lines 56-57). The overcoat is an epoxy UV coating comprising resin and photoinitiator (col. 3, lines 28-33). The Johnson laminates are sleeve labels for containers that protect the containers from mechanical damage (abstract).

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the protective outer coating over the printed packaging films suggested by the combination of Kuo and Kosterka in order to protect the outer layer from mechanical damage.

The motivation to employ the overcoat of Johnson on the films suggested by the combination of Kuo and Kosterka is found in the Johnson abstract, where the overcoats are said to protect from mechanical damage. It is deemed desirable to prevent mechanical damage to the outer layers of a package by employing the protective coating of Johnson over the printed surfaces of the films suggested by the combination of Kuo and Kosterka in order to keep the packages attractive and improve the shelf life of the packaged product.

The selection of overcoats that provide gloss for the packaging suggested by the combined references would be a matter of design choice.

The use of an amount of overcoat that would reduce the tendency to produce ghosting in the packaging suggested by the combined references is a matter of optimization. See *In re Boesch*, 205 USPQ 2156 (CCPA 1980).

The mechanism by which the overcoat cures is not germane to the patentability of the multilayer system claimed. Packaging suggested by the combined references is

deemed a matter of product optimization, depending upon the properties desired in the final film.

The use of packaging suggested by the combined references to package food is deemed a matter of design/engineering choice.

7. Claim 14 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo and Kosterka as applied to claims 1-6, 8-9, 12-13, 18-26, 34 and 48-49 above, and further in view of Elms (US 3,976,614).

Kuo and Kosterka are discussed above.

They fail to teach melamine-based inks.

Elms shows thermoset melamine-based radiation curable coatings (col. 5, lines 60+). The coatings are water resistant (abstract).

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the melamine-based coatings of Elms in making the inks for production of the packaging films suggested by the combination of Kuo and Kosterka in order to make the inks water resistant.

The motivation to use the melamine-based coatings of Elms in the packaging of the Kuo and Kosterka combination is found in the Elms abstract, where the water resistance of the melamine-based coatings is taught. It is deemed desirable to make inks water resistant so that they will not be affected by water vapor generated by the packaged products.

8. Claims 15 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo and Kosterka as applied to claims 1-6, 8-9, 12-13, 18-26, 34 and 48-49 above, and further in view of Mossbrook (US 6,231,953).

Kuo and Kosterka are discussed above.

They fail to teach urethane-based inks.

Mossbrook teaches urethane-based inks and teaches that they have good adhesion to surface layers (col. 3, lines 26+).

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the urethane-based inks of Mossbrook as the inks for production of the packaging films suggested by the combination of Kuo and Kosterka in order to make the inks adhere well to the base layers.

The motivation to use the urethane-based inks of Mossbrook in the packaging of the Kuo and Kosterka combination is found in the Mossbrook abstract, where the adhesion of the urethane-based inks is taught. It is deemed desirable to make inks adhere well so that they will not be rubbed off during handling/storage.

9. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo and Kosterka as applied to claims 1-6, 8-9, 12-13, 18-26, 34 and 48-49 above, and further in view of Tu (US 3933407).

Kuo and Kosterka are discussed above.

They fail to teach anti-fog coatings on base layers.

Tue teaches that antifog coatings can be used on base layers to give anti-fogging properties (abstract).

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the antifog coatings of Tu on the surface layers suggested by the combination of Kuo and Kosterka in order to give the surface layer antifog properties.

The motivation to give surface layers antifog properties is found at col. 1 of Tu, where the undesirability of fogging is discussed. It is deemed desirable to make packaging that does not fog in order to make the product packaged look more attractive.

Conclusion

Any inquiry concerning this communication should be directed to the Examiner, Sandra M. Nolan, whose telephone number is 703/308-9545. The Examiner can normally be reached on Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

If attempts to reach the Examiner by telephone are unsuccessful, her supervisor, Harold Pyon, can be reached at 703/308-4251. The general fax number for the art unit is 703/305-5436. The fax number for after final communications is 703/872-9310. The receptionist answers 703/308-0661.

S. M. Nolan
Patent Examiner
Technology Center 1700

SMN/smn
February 25, 2002
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